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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,316	09/29/2003	Zohar Bogin	42P9348D2	4663

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EXAMINER

HUYNH, KIM T

ART UNIT PAPER NUMBER

2112

DATE MAILED: 04/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/674,316	Applicant(s) BOGIN ET AL.	
	Examiner Kim T. Huynh	Art Unit 2112	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 10, 12-13, 15-16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ajanovic et al. (US Patent 6,021,483) in view of Solomon et al. (US Patent 5,948,084)

As for claim 10, Ajanovic teaches a method, comprising: dispatching a bus transaction from a requestor to a device (see figure 1, processor 101, bus 120, device 122 connecting to the bus 120 wherein the processor 101 is a requestor and requesting to communicate with the display device or devices connecting to the bus 120 via the bridge memory controller (see column 3 lines 1-14)., starting a timer (see figure 2, CLT timer 234 and column 5 lines 45-46)., determining if the timer expires before the device responds to the dispatched bus transaction (see column 5 lines 45-46, wherein the timer 223 determines whether the transaction from the processor 101 exceeded a predetermined set time); and issuing a deferred transaction response to the requestor if the timer expires (see column 5 lines 42-55).

Ajanovic discloses all the limitations as above except starting a timer in response to dispatching of the bus transaction. However, Solomon discloses a

timer triggered by a signal on any one of a number of signal lines, for example signal line FRAME# is asserted, thereby initiating the first transaction of the current arbitration cycle. (col.6, lines 15-32)

It would have been obvious to one having ordinary skills in the art at the time the invention was made to incorporate the Solomon's teaching into Ajanovic's system by employing a timer, the bus efficiency is improved because there are fewer arbitration events initiated for the same number of transactions, thereby reducing the dead time. (col.5, lines 30-37)

As for claim 12, Ajanovic teaches the method of claim 10, wherein issuing includes issuing an unconditionally deferred transaction (see column 5 lines 18-20).

As for claim 13 Ajanovic teaches an apparatus, comprising: a command dispatcher coupled to a command queue (see figure 1-2, CPU 101, 1111*. a detector coupled to the command dispatcher to detect if a command dispatched to the command queue by the command dispatcher has been responded to (see figure 2, timer 223, transaction 222 and column 5 lines 41-55); a timer coupled to the detector (see figure 2, timer 223)., and logic coupled to the timer to issue a deferred response to the requestor if the timer expires before the command has been responded to (see figure 2 and column 5 lines 41-55).

As for claim 15, Ajanovic teaches the apparatus of claim 13, wherein the timer is

a programmable timer (see figure 2, timer 223).

As for claim 16, Ajanovic teaches a machine-readable medium having stored thereon instructions (see column 3 lines 1-14), which when executed by at least one machine cause said at least one machine to perform: receiving a bus transaction from a requestor to a device (see figure 7); starting a timer (see figure 7); determining if the timer expires before the device responds to the dispatched bus transaction (see figure 7)., and issuing a deferred transaction response to the requestor if the timer expires (see figure 7). As for claim 18, Ajanovic teaches the medium of claim 16, wherein issuing includes issuing an unconditionally deferred transaction (see column 5 lines 18-20).

Ajanovic discloses all the limitations as above except starting a timer in response to dispatching of the bus transaction. However, Solomon discloses a timer triggered by a signal on any one of a number of signal lines, for example signal line FRAME# is asserted, thereby initiating the first transaction of the current arbitration cycle. (col.6, lines 15-32)

It would have been obvious to one having ordinary skills in the art at the time the invention was made to incorporate the Solomon's teaching into Ajanovic's system by employing a timer, the bus efficiency is improved because there are fewer arbitration events initiated for the same number of transactions, thereby reducing the dead time. (col.5, lines 30-37)

3. Claims 1, 14 and 17 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Ajanovic et al. (US Patent 6,021,483) in view of Solomon et al. (US Patent 5,948,084) and further in view of Ljungberg et al. (US Patent 5,493,566).

As for claims 1, 14 and 17, the modified of Ajanovic does not expressly teach starting occurs only if an in-order queue has a depth of 1. However, Ljungberg teaches buffer detection by constantly monitored the buffer is being full (see column 6 lines 31-48). Therefore, it would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have combined the teachings of Ljungberg into the teachings of Ajanovic because Ljungberg providing Ajanovic's buffer data availability detection to preventing the buffer is overfull and the consequence would lose of data in transmission.

Response to Amendment

4. Applicant's amendment filed on 12/01/05 have been fully considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. *Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kim Huynh whose telephone number is (571)272-3635 or via e-mail addressed to [kim.huynh3@uspto.gov]. The examiner can normally be reached on M-F 9.00AM- 6:00PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rehana Perveen can be reached at (571)272-3676 or via e-mail addressed to [rehana.perveen@uspto.gov].*

The fax phone numbers for the organization where this application or proceeding is assigned are (571)273-8300 for regular communications and After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571)272-2100.

Kim Huynh

April 25, 2006


REHANA PERVEEN
SUPERVISORY PATENT EXAMINER
4/26/06